

WHAT IS CLAIMED IS:

1. A method for selectively passing closed caption data from a source device to a display device comprising:

receiving a data signal in said source device, said data signal including un-rendered closed caption data and video data;

separating said video data from said un-rendered closed caption data;

determining closed caption processing capabilities of said display device; and

if said display device is configured to process un-rendered closed caption data, transmitting said un-rendered closed caption data to said display device.

2. The method of claim 1, wherein said un-rendered closed caption data is sent to said display device only upon request by said display device.

3. The method of claim 1, wherein said determining closed caption processing capabilities of said display device comprises:

communicating with said display device via said source device;

accessing extended display identification data (EDID) corresponding to said display device; and

determining closed caption processing capabilities of said display device based on said EDID.

4. The method of claim 3, wherein said communication with said display device occurs over a digital visual interface (DVI).

5. The method of claim 3, wherein said communication with said display device occurs over a high definition multimedia interface (HDMI).

6. The method of claim 1, further comprising rendering said closed caption data in said source device if said display device is not configured to process un-rendered closed caption data.

7. A system for selectively passing closed caption data from a source device to a display device comprising:

a source device; and

a sink device communicatively coupled to said source device;

wherein said source device is configured to receive a data signal including un-rendered closed caption data and video data, separate said video data from said un-rendered closed caption data, determine closed caption processing capabilities of said sink device, and if said sink device is configured to process un-rendered closed caption data, transmit said un-rendered closed caption data to said sink device.

8. The system of claim 7, wherein said source device comprises a set-top box.

9. The system of claim 7, wherein said sink device comprises one of a digital television, a computer monitor, or a projector.

10. The system of claim 7, wherein said source device is communicatively coupled to said sink device via a digital visual interface.

11. The system of claim 7, wherein said source device is communicatively coupled to said sink device via a high-definition multimedia interface.

12. The system of claim 7, wherein said source device is configured to be communicatively coupled to a head-end unit.

13. The system of claim 7, wherein said source device comprises:
a number of data storage units;

a central processing unit;
a digital visual interface input/output;
an I2C bus communicatively coupling said central processing unit and said digital visual interface input/output; and
a processor communicatively coupled to said central processing unit and said digital visual interface input/output.

14. The system of claim 13, wherein said source device is configured to determine closed caption processing capabilities of said sink device through said digital visual interface input/output.

15. A system for selectively passing closed caption data from a source device to a display device comprising:

signal processing means for receiving and processing a video and closed caption containing signal; and

display means communicatively coupled to said signal processing means;

wherein said signal processing means is configured to receive a data signal including un-rendered closed caption data and video data, separate said video data from said un-rendered closed caption data, determine closed caption processing capabilities of said display means, and if said display means is configured to process un-rendered closed caption data, transmit said un-rendered closed caption data to said display means.

16. The system of claim 15, wherein said signal processing means comprises a set-top box.

17. The system of claim 15, wherein said display means comprises one of a digital television, a computer monitor, or a projector.

18. The system of claim 15, wherein said processing means is communicatively coupled to said display means via a digital visual interface.

19. The system of claim 15, wherein said processing means is communicatively coupled to said display means via a high-definition multimedia interface.

20. A source device configured to selectively pass closed caption data from a source device to a display device comprising:

- a number of data storage units;
- a central processing unit;
- a digital visual interface input/output;
- an I2C bus communicatively coupling said central processing unit and said digital visual interface input/output; and
- a processor communicatively coupled to said central processing unit and said digital visual interface input/output;

wherein said source device is configured to receive a data signal including un-rendered closed caption data and video data, separate said video data from said un-rendered closed caption data, determine closed caption processing capabilities of a communicatively coupled display device, and if said display device is configured to process un-rendered closed caption data, transmitting said un-rendered closed caption data to said display device.

21. The source device of claim 20, wherein said source device is configured to determine closed captioning processing capabilities of a communicatively coupled device by accessing said coupled devices extended display identification data (EDID).

22. The source device of claim 21, wherein said EDID is communicated through said digital visual interface input/output.

23. The source device of claim 20, wherein said source device comprises a set-top box.

24. A monitor descriptor block comprising:
a first bit, wherein the setting of said first bit indicates a closed caption capability of an associated monitor;
a second bit, wherein the setting of said second bit indicates that said associated monitor requests that un-rendered closed captioning data be transmitted to said associated monitor; and
a third bit, wherein the setting of said third bit indicates that a source device has transmitted closed captioning data to said associated monitor.

25. The monitor descriptor block of claim 24, further comprising a plurality of bits, each of said bits indicating a different closed captioning format capability.

26. A processor readable carrier including processor instructions that instruct a processor to perform the steps of:
receiving a data signal, said data signal including un-rendered closed caption data and video data;
separating said video data from said un-rendered closed caption data;
determining closed caption processing capabilities of a coupled display device; and
if said display device is configured to process un-rendered closed caption data, transmitting said un-rendered closed caption data to said display device.

27. The processor readable carrier of claim 26, wherein said processor instructions further instruct a processor to only transmit said un-rendered closed caption data to said display device upon request from said display device.

28. The processor readable carrier of claim 26, wherein said determining closed caption processing capabilities of said display device comprises:
communicating with said display device;
accessing an extended display identification data (EDID) corresponding to said display device; and

determining closed caption processing capabilities of said display device based on said EDID.

29. The method of claim 28, wherein said communication with said display device comprises communication via a digital visual interface (DVI).

30. The method of claim 28, wherein said communication with said display device comprises communication via a high definition multimedia interface (HDMI).